

ABSTRACT

A mobile field electrical supply, freshwater and saltwater purification system, power wash, wash station, and water collection and reclamation apparatus provides water collection, handling, treatment, and storage capacity. The apparatus comprises a raw water filtration system, a sodium ion exchange system, a storage system with a plurality of tanks, a reverse osmosis system, and heating and distributions systems. The apparatus also comprises a mobile electrical power system. Optionally, the apparatus includes a desalination system, a disinfection system, a rainwater collection system, a fluid containment and recovery system, and an auxiliary fluid distribution system. The disinfection system may include a chlorination, ultraviolet light, or ozone disinfection system, and may further include a distillation system that may be conventionally powered or solar powered. Water may be distributed through a plurality of auxiliary devices, including pressure pumps, heaters, fluid lines, power wash equipment, shower heads, and associated air powered tools.